

27/11/2007, 10535187II.trn

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SESSION RESUMED IN FILE 'HCAPLUS' AT 08:20:53 ON 26 NOV 2007

FILE 'HCAPLUS' ENTERED AT 08:20:53 ON 26 NOV 2007

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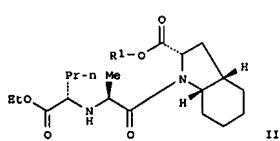
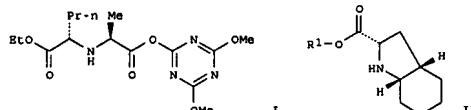
COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	173.84	519.57
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-24.96	-24.96

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87 L6/P
39 L3
3047744 RACT/RL
32 L3/RACT
(L3 (L) RACT/RL)
L8 32 L6/P AND L3/RACT

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27/11/2007, 10535187II.trn

L8 ANSWER 1 OF 32 HCPLUS COPYRIGHT 2007 ACS on STN
ED Entered STN: 03 Aug 2007
GI



AB A process for the preparation of N-[1-(S)-ethoxycarbonyl-1-butyl]-L-alanine-DMT complex (I) by reaction of N-[1-(S)-ethoxycarbonyl-1-butyl]-L-alanine with 4-(4,6-dimethoxy-1,3,5-triazin-2-yl)-4-methylmorpholinium chloride in a solvent and its use in the synthesis of perindopril, perindopril erbumine or pharmaceutically acceptable salts by reaction of I with compound (II)

(R1) - aryl, alkyl, or silyl protective group) in a solvent, following by deprotecting of compound (III) using suitable deprotecting agent, is described. Thus, N-[1-(S)-ethoxycarbonyl-1-butyl]-L-alanine and 4-(4,6-dimethoxy-1,3,5-triazin-2-yl)-4-methylmorpholinium chloride were mixed in THF and stirred for about 10 min at t° = 20-25° under nitrogen. To the resulting solution contained complex I was added

(2S, 3aS, 7aS)-benzyl-perhydroindole-2-carboxylate at t° = 20-25° under nitrogen, and after separation and purification 1.5 g of perindopril benzyl ester was obtained, which was transformed into perindopril tert-Bu amine salt.

ACCESSION NUMBER: 2007:845244 HCPLUS

DOCUMENT NUMBER: 147:212285

TITLE: Process for the preparation of

N-[1-(S)-ethoxycarbonyl-1-butyl]-L-alanine-DMT complex and its use in the preparation of perindopril

Inventor(s): Joshi, Narendra Shrikant; Pradhan, Nitin Sharad Chandra

L8 ANSWER 1 OF 32 HCPLUS COPYRIGHT 2007 ACS on STN (Continued)
PATENT ASSIGNEE(S): Glenmark Pharmaceuticals Limited, India
SOURCE: PCT Int. Appl., 16pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2007085933	A2	20070802	WO 2007-IB150	20070123
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, US, US, UZ, VC, VN, ZA, ZM, ZW				
RW: AT, BE, BO, CH, CY, CZ, DE, DK, EB, ES, FI, PR, GB, GR, HU, IB, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CP, CO, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KB, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,				
KG, KZ, MD, RU, TJ, TM				

PRIORITY APPLN. INFO.: IN 2006-MU125 A 20060125

US 2006-792875P P 20060418

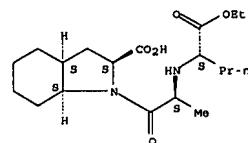
OTHER SOURCE(S): CASREACT 147:212285; MARPAT 147:212285

IT 82834-16-0P, Perindopril 107133-36-8
RL: IMP (Industrial manufacture); PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USSS (Uses)
(preparation of ethoxycarbonylbutyl alanine DMT complex and its use in preparation of perindopril and perindopril erbumine)

RN 82834-16-0 HCPLUS

CN 1H-Indole-2-carboxylic acid, 1-[(2S)-2-[(1S)-1-(ethoxycarbonyl)butyl]amino]-1-oxopropyl]octahydro-, (2S,3aS,7aS)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



RN 107133-36-8 HCPLUS

CN 1H-Indole-2-carboxylic acid, 1-[(2S)-2-[(1S)-1-

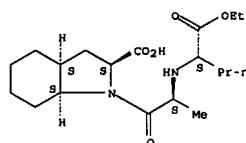
L8 ANSWER 1 OF 32 HCPLUS COPYRIGHT 2007 ACS on STN (Continued)
(ethoxycarbonyl)butyl]amino]-1-oxopropyl]octahydro-, (2S,3aS,7aS)-, compd.

with 2-methyl-2-propanamine (1:1) (CA INDEX NAME)

CM 1

CRN 82834-16-0
CMP C19 H32 N2 O5

Absolute stereochemistry. Rotation (-).



CM 2

CRN 75-64-9
CMP C4 H31 N



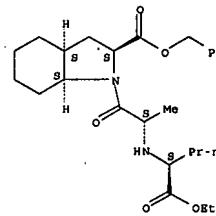
IT 122454-52-8P
RL: IMP (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of ethoxycarbonylbutyl alanine DMT complex and its use in preparation of perindopril and perindopril erbumine)

RN 122454-52-8 HCPLUS

CN 1H-Indole-2-carboxylic acid, 1-[(2S)-2-[(1S)-1-(ethoxycarbonyl)butyl]amino]-1-oxopropyl]octahydro-, phenylmethyl ester, (2S,3aS,7aS)- (CA INDEX NAME)

Absolute stereochemistry.

L8 ANSWER 1 OF 32 HCPLUS COPYRIGHT 2007 ACS on STN (Continued)



27/11/2007, 10535187II.trn

L8 ANSWER 2 OF 32 HCAPLUS COPYRIGHT 2007 ACS on STN

ED Entered STN: 23 Feb 2007

AB The present invention relates to a new process for the preparation of pure perindopril erbumine. The present invention also relates to a new process

for the preparation of crystalline form D of perindopril erbumine.

Crystalline

perindopril erbumine is formulated into a pharmaceutically acceptable dosage form. Thus, (2S,3aS,7aS)-2-carboxyhydroindole benzyl ester was treated with N-((S)-1-carboxybutyl)-(S)-alanine in acetonitrile in presence of O-(benzotriazol-1-yl)-N,N,N',N'-tetramethyluronium hexafluorophosphate to afford 88% perindopril benzyl ester.

Hydrogenolysis of crude perindopril benzyl ester over 10% Pd/C gave crude perindopril (2.33% of diketopiperazine I, 0.54% of diketopiperazine II). Crude perindopril was dissolved in wet Et acetate, insol. impurities were filtered off, tert-butylamine was added to the filtrate, the mixture was heated to boiling, filtered and then cooled to 0° to precipitate perindopril erbumine in crystalline form D.

ACCESSION NUMBER: 2007:200622 HCAPLUS

DOCUMENT NUMBER: 146:259148

TITLE: A process for the preparation of perindopril erbumine for dosage forms

INVENTOR(S): Ham, Zoran; Purlan, Borut

PATENT ASSIGNEE(S): Lek Pharmaceuticals D.D., Slovenia

SOURCE: PCT Int. Appl., 26pp.

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2007020012	A1	20070222	WO 2006-PB7926	20060810
W:	AB, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LR, LS, LT, LU, LV, LY, MA, MD, MO, MK, MN, MM, MX, NA, NC, NO, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW			
RW:	AT, BE, BG, CH, CY, CZ, DE, DK, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BP, BJ, CP, CO, CI, CM, GA, GN, GO, GW, ML, MR, NE, SN, TD, TO, BW, GH, GM, KE, LS, MM, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
PRIORITY APPLN. INFO.:	SI 2005-232	SI 2005-232	A 20050812	

IT 107133-36-8P, Perindopril erbumine

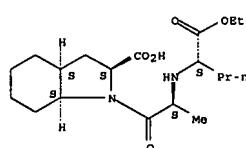
RL: PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of perindopril erbumine and its crystalline form for dosage forms)

RN 107133-36-8 HCAPLUS

CN 1H-Indole-2-carboxylic acid, 1-[(2S)-2-[(1S)-1-

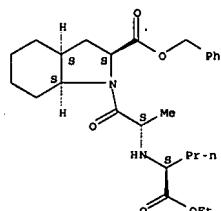
L8 ANSWER 2 OF 32 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 122454-52-6 HCAPLUS

CN 1H-Indole-2-carboxylic acid, 1-[(2S)-2-[(1S)-1-(ethoxycarbonyl)butyl]amino]-1-oxopropyl]octahydro-, phenylmethyl ester, (2S,3aS,7aS)- (CA INDEX NAME)

Absolute stereochemistry.



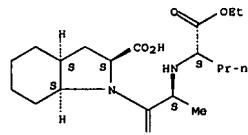
REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 2 OF 32 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)
(ethoxycarbonyl)butyl]amino]-1-oxopropyl]octahydro-, (2S,3aS,7aS)-, compd. with 2-methyl-2-propanamine (1:1) (CA INDEX NAME)

CM 1

CRN 82834-16-0
CMP C19 H32 N2 O5

Absolute stereochemistry. Rotation (-).



CM 2

CRN 75-64-9
CMP C4 H11 N



IT 82834-16-0P, Perindopril 122454-52-8P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of perindopril erbumine and its crystalline form for dosage forms)

RN 82834-16-0 HCAPLUS

CN 1H-Indole-2-carboxylic acid, 1-[(2S)-2-[(1S)-1-(ethoxycarbonyl)butyl]amino]-1-oxopropyl]octahydro-, (2S,3aS,7aS)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

L8 ANSWER 3 OF 32 HCAPLUS COPYRIGHT 2007 ACS on STN

ED Entered STN: 16 Feb 2007

AB The present invention relates to a novel crystalline η form of perindopril erbumine exhibiting characteristic 20 values and having purity not less than 99.8%. More particularly, the present invention relates to a process for the preparation of the novel crystalline η form of perindopril

erbumine comprising the steps of (i) dissolving perindopril erbumine monohydrate in halogenated hydrocarbon solvent; (ii) adding a co-solvent to the mixture of the content obtained from step (i); (iii) removing the mixture of solvents under reduced pressure in the range of 25 to 35%; and (iv) filtering off the solid obtained.

ACCESSION NUMBER: 2007:175534 HCAPLUS

DOCUMENT NUMBER: 146:236294

TITLE: Preparation of novel crystalline η (eta) form of perindopril erbumine

INVENTOR(S): Ujagare, Ashish; Kochrekar, D. A.; Sarjeker, Pushpalata

PATENT ASSIGNEE(S): Arch Pharmalabs Limited, India

SOURCE: PCT Int. Appl., 21pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2007017894	A2	20070215	WO 2006-IN156	20060504
WO 2007017894	A3	20070510		

W: AB, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LR, LS, LT, LU, LV, LY, MA, MD, MO, MK, MN, MM, MX, MZ, NA, NC, NO, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, SC, SD, SE, SG, SK, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: AT, BE, BG, CH, CY, C2, DE, DK, ER, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BP, BJ, CP, CO, CI, CM, GA, GN, GO, GW, ML, MR, NE, SN, TD, TO, BW, GH, GM, KE, LS, MM, MZ, NA, SD, SL, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA

PRIORITY APPLN. INFO.: IN 2005-MU561 A 20050505

IT 107133-36-8P, Perindopril erbumine

RL: PRP (Physical, engineering or chemical process); PRP (Properties); PUR

(Purification or recovery); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)

(preparation and purification of η crystal form of perindopril

erbumine of

high purity and good solubility)

RN 107133-36-0 HCAPLUS

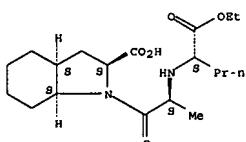
CN 1H-Indole-2-carboxylic acid, 1-[(2S)-2-[(1S)-1-(ethoxycarbonyl)butyl]amino]-1-oxopropyl]octahydro-, (2S,3aS,7aS)-, compd.

with 2-methyl-2-propanamine (1:1) (CA INDEX NAME)

L6 ANSWER 3 OF 32 HCPLUS COPYRIGHT 2007 ACS on STN (Continued)

CM 1
CRN 82834-16-0
CMP C19 H32 N2 O5

Absolute stereochemistry. Rotation (-).



CM 2

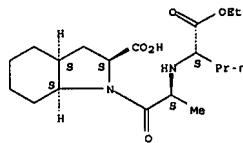
CRN 75-64-9
CMP C4 H11 N

IT 690267-97-1P, Perindopril erbumine monohydrate
RL: PEP (Physical, engineering or chemical process); PRP (Properties);
SPN (Synthetic preparation); PREP (Preparation); PROC (Process)
(preparation and purification of η crystal form of perindopril
erbumine of
high purity and good solubility)
RN 690267-97-1 HCPLUS
CN 1H-Indole-2-carboxylic acid, 1-[(2S)-2-[(1S)-1-(ethoxycarbonyl)butyl]amino]-1-oxopropyl]octahydro-, (2S,3aS,7aS)-,
compd.
with 2-methyl-2-propanamine, hydrate (1:1:1) (CA INDEX NAME)

CM 1
CRN 82834-16-0
CMP C19 H32 N2 O5

Absolute stereochemistry. Rotation (-).

L6 ANSWER 3 OF 32 HCPLUS COPYRIGHT 2007 ACS on STN (Continued)



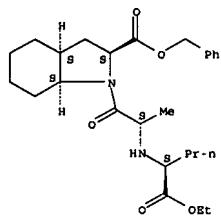
CM 2

CRN 75-64-9
CMP C4 H11 N

IT 122454-52-8P
RL: PUR (Purification or recovery); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and purification of η crystal form of perindopril
erbumine of
high purity and good solubility)
RN 122454-52-8 HCPLUS
CN 1H-Indole-2-carboxylic acid, 1-[(2S)-2-[(1S)-1-(ethoxycarbonyl)butyl]amino]-1-oxopropyl]octahydro-, phenylmethyl ester,
(2S,3aS,7aS)- (CA INDEX NAME)

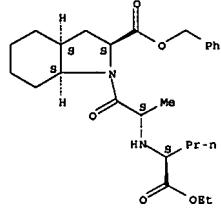
Absolute stereochemistry.

L6 ANSWER 3 OF 32 HCPLUS COPYRIGHT 2007 ACS on STN (Continued)



IT 924637-23-0P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation);
RACT (Reactant or reagent)
(preparation and purification of η crystal form of perindopril
erbumine of
high purity and good solubility)
RN 924637-23-0 HCPLUS
CN 1H-Indole-2-carboxylic acid, 1-[(2S)-2-[(1S)-1-(ethoxycarbonyl)butyl]amino]-1-oxopropyl]octahydro-, phenylmethyl ester,
hydrochloride (1:1), (2S,3aS,7aS)- (CA INDEX NAME)

Absolute stereochemistry.



● HCl

L6 ANSWER 4 OF 32 HCPLUS COPYRIGHT 2007 ACS on STN

ED Entered STN: 16 Feb 2007

AB The present invention relates to a novel crystalline form of perindopril erbumine monohydrate exhibiting characteristic 2D values and having purity not less than 99.8%. More particularly, the present invention relates to a process for the preparation of the novel crystalline form of perindopril erbumine monohydrate comprising steps of (i) dissolving perindopril erbumine in water; (ii) extracting the solution with toluene

or xylene; (iii) removing water from the aqueous layer obtained from step (i);

adding a polar solvent to the mass obtained from step (ii) at 20 to 45°, and (iv) filtering off the solid obtained.

ACCESSION NUMBER: 2007-175533 HCPLUS
DOCUMENT NUMBER: 146-236293
TITLE: Preparation of novel crystalline form of perindopril erbumine monohydrate
INVENTOR(S): Ujagare, Ashish; Kochrekar, D. A.; Sarjekar, Pushpalata
PATENT ASSIGNEE(S): Arch Pharmalabs Limited, India
SOURCE: PCT Int. Appl., 21pp.
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2007017893	A2	20070215	WO 2006-IN155	20060504
WO 2007017893	A3	20070510		

W: AE, AQ, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LB, LT, LU, LV, LY, MA, MD, MG, MK, MN, MM, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, BB, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UG, UZ, VC, VN, YU, ZA, ZM, ZW
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IB, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BP, BJ, CP, CO, CI, CM, GA, GN, GO, GW, ML, MR, NE, SN, TD, TO, BW, GH, GM, KB, LS, MM, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA

PRIORITY APPLN. INFO.: IN 2005-MU562 A 20050505

IT 690267-97-1P, Perindopril erbumine monohydrate
RL: PEP (Physical, engineering or chemical process); PRP (Properties);
PUR (Purification or recovery); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); US88 (Uses)

(preparation and purification of crystalline form of perindopril erbumine monohydrate
of high purity)

RN 690267-97-1 HCPLUS
CN 1H-Indole-2-carboxylic acid, 1-[(2S)-2-[(1S)-1-(ethoxycarbonyl)butyl]amino]-1-oxopropyl]octahydro-, (2S,3aS,7aS)-,
compd.
with 2-methyl-2-propanamine, hydrate (1:1:1) (CA INDEX NAME)